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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/869,528	06/28/2001	Chao Liu	43056-260040	4658

7590 02/24/2005

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EXAMINER

SHERKAT, AREZOO

ART UNIT	PAPER NUMBER
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2131

DATE MAILED: 02/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/869,528

Applicant(s)

LIU, CHAO

Examiner

Arezoo Sherkat

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 June 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 June 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>6/28/2001</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claims 1-10 are presented for examination.

Priority

Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed in parent Application No. PCT/CN 99/00220, filed on December 30, 1998.

Information Disclosure Statement

The information disclosure statement filed 6/28/2001 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each cited foreign patent document; each non-patent literature publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. It has been placed in the application file, but the information referred to therein has not been considered.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 1 recites the limitation "the digital reader" in the second line. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lapointe et al., (U.S. Patent No. 5,056,142 and Lapointe hereinafter), in view of Kuo, (U.S. Patent No. 5,988,503 and Kuo hereinafter).

Regarding claims 1 and 4, Lapointe discloses a discrimination system of cryptic graph-text including printed sheet and the digital reader matched, characterized in that:

the surface of the said printed sheet is fixed with a complete cryptic graph-text document, which comprises several individual cryptic graph-text documents and presents itself as a digital dot group with very high density and each of said individual cryptic graph-text documents is digitized and decomposed, the surface of the said digital reader is fixed with a complete omni directional lens array or with several arrays on separated parts of the surface, the surface of the vein is uneven or is smooth and many miniaturized lenses with specific focal lengths are distributed on it, and all arrays are fixed with convex lenses or holes or both of them, the lenses are arranged in accordance with the pattern of the high density dot groups that are formed by one of the individual cryptic graph-text pattern digitized and decomposed (Col. 4, lines 59-67 and Col. 5, lines 1-61).

Lapointe does not expressly disclose said printed sheet can also be fixed with the above mentioned complete cryptic graph-text documents presented as the high density dot groups on both side and said printed sheet is made of the transparent or translucent material.

However, Kuo, in an analogous art, discloses that a printed sheet can be made of transparent, translucent or non-transparent material, and that the printed sheet can also be fixed with complete cryptic graph-text documents presented as the high density dot groups on both side (Col. 7, lines 15-59 and Col. 8, lines 1-15 and Col. 10, lines 8-34).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of applicant's invention to modify the discrimination system of Lapointe by including the printed sheet and the cryptic technique as disclosed by Kuo. This modification would have been obvious because one of ordinary skill in the art would have been motivated by the suggestion of Kuo to provide for a discrimination system wherein document counterfeiting is made exceedingly difficult (Kuo, Col. 1, lines 44-65).

Regarding to claim 2, Lapointe discloses the lenses of omni-directional lens arrays are arranged in grid pattern or in step-shaped or in wavelike pattern or with special combination (i.e., plurality of apertures 11 extend through the card 7 and are located between the outermost apertures 9A and 9B)(Col. 5, lines 15-40).

Regarding claim 3, Lapointe discloses the digital reader is also fixed with some cryptic patterns on the surface near the edges (i.e., a first pair of apertures 9A and 9B extend through the card 7 adjacent opposite sides thereof)(Col. 5, lines 1-15).

Regarding claim 5, Lapointe discloses said transparent or translucent material of said digital reader is plastic or colloid (i.e., the overlay means may be made of any material)(Col. 4, lines 9-16).

Regarding claim 6, Lapointe discloses said digital reader is of rigid card or flexible card (i.e., the overlay means may be rigid or flexible)(Col. 4, lines 29-35).

Regarding claim 7, Lapointe discloses a substrate carrying a representation of an article of merchandise (Col. 4, lines 59-67).

Moreover, Kuo discloses that the printed sheet can be affixed on different items or documents (i.e., on an access card for entry to a particular building, or a driver's license, or other picture IDs)(Col. 1, lines 13-34).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of applicant's invention to modify the discrimination system of Lapointe by including the printed sheet that can be affixed on different items or documents as disclosed by Kuo. This modification would have been obvious because one of ordinary skill in the art would have been motivated by the suggestion of Kuo to provide an

attachable hologram to generate stereo holographic image for aesthetic purpose (Kuo, Col. 1, lines 44-65).

Regarding claim 8, Lapointe discloses a manufacturing method of the discrimination system of the cryptic graph-text, comprising the following procedures:

a. enciphering/digitizing the visible and cryptic graph-text documents step by step by the use of randomly generated enciphering system resulting in the digital graph-text documents, enciphering parameters of the multivariate function are assigned in each step and are deleted before the next step is commenced (i.e., overlay card 7 can be used to decode an entirely different information symbol pattern relative to the array)(Col. 5, lines 41-49), and b. decomposing the graph-text documents by operational decomposing digitizing system and creating several cryptic patterns and complete cryptic document of the corresponding digital reader functions and cryptic document function, respectively (Col. 5, lines 29-49); and

c. fixing the cryptic patterns and the complete cryptic document onto the surfaces of the digital readers and the printed sheet, respectively, and forming the high density dot groups by the use of the high precision optical output instruments (Col. 4, lines 59-67).

Regarding claim 9, Lapointe discloses the procedure of fixing cryptic patterns onto the surfaces of the printed sheet is by printing (Col. 5, lines 15-24).

Moreover, Kuo discloses the procedure of fixing the cryptic patterns onto the surfaces of said digital readers and the printed sheet is by printing and hologram (Col. 3, lines 30-67 and Col. 4, lines 1-43) and by heating and pressurizing (Col. 5, lines 18-34).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of applicant's invention to modify the discrimination system of Lapointe by including the procedure of fixing the cryptic patterns onto the surfaces of said digital readers and the printed sheet is by printing and hologram as disclosed by Kuo. This modification would have been obvious because one of ordinary skill in the art would have been motivated by the suggestion of Kuo to provide an attachable hologram to generate stereo holographic image for aesthetic purpose (Kuo, Col. 1, lines 44-65).

Regarding claim 10, Lapointe discloses the technique of fixing a complete cryptic document onto the surface(s) the printed sheet by printing (Col. 5, lines 15-24).

Moreover, Kuo discloses the technique of fixing a complete cryptic document onto the surface(s) of digital readers and the printed sheet by printing, double side pressing or rolling (Col. 7, lines 15-59).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of applicant's invention to modify the discrimination system of Lapointe by the technique of fixing a complete cryptic document onto the surface(s) of digital readers and the printed sheet by printing, double side pressing or rolling as disclosed by Kuo. This modification would have been obvious because one of ordinary skill in the art

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would have been motivated by the suggestion of Kuo to provide for a hologram film on which serration defining a hologram is formed so as to make counterfeiting difficult (Kuo, Col. 1, lines 44-65).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Tanaka et al., (U.S. Patent No. 5,582,103),

Tanaka et al., (U.S. Patent No. 5,443,579),

Koltai et al., (U.S. Patent No. 6,104,812),

Jain, (U.S. Patent No. 5,284,364),

Warner et al., (U.S. Patent No. 5,830,609),

Levine (U.S. Patent No. 4,512,581),

Rhoads, (U.S. Patent No. 6,750,985), and

Amidror et al., (U.S. Patent No. 5,995,638).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Arezoo Sherkat whose telephone number is (571) 272-3796. The examiner can normally be reached on 8:00-4:30 Monday-Friday.

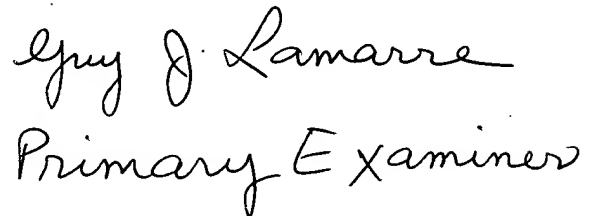
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on (571) 272-3795. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Arezoo Sherkat
Patent Examiner
Group 2131
Feb. 7, 2005



Primary Examiner